```
     (FILE 'USPAT' ENTERED AT 09:10:25 ON 15 JUN 1998)
                SET PAGELENGTH 99
                SET AUHELP NONE
L1          36604 S AMINO(A)ACIDS
L2           2940 S NEUR?(A)NET?
L3              1 S L1(P)L2
L4          28098 S PEPTIDE#
L5              3 S L2(P)L4

=>
```

```
     (FILE 'USPAT' ENTERED AT 07:38:43 ON 15 JUN 1998)
                SET PAGELENGTH 99
                SET AUHELP NONE
L1           2940 S NEUR?(A)NET?
L2          28098 S PEPTIDE#
L3          49428 S AMINO(A)ACID#
L4             49 S L1 AND L2
L5             52 S L1 AND L3

=>
```

US PAT NO: 5,693,676 [IMAGE AVAILABLE] L5: 1 of 3

SUMMARY:

BSUM(11)

Recently, . . . third component of the autonomic nervous system, known as the enteric nervous system (ENS), has been described and elucidated. This **neural network** innervates the gut continuously from esophagus to anus. It is composed of enteric neurons, and the processes of extrinsic efferent. . . ENS is the diversity of chemical messengers which enteric neurons contain and release. In addition to acetylcholine and norepinephrine, various **peptide** and non-**peptide** substances have been identified which appear to function as neurotransmitters in the ENS. Inhibitory non-adrenergic non-cholinergic (NANC) nerves are thought. . .

US PAT NO: 5,447,939 [IMAGE AVAILABLE] L5: 2 of 3

SUMMARY:

BSUM(7)

The . . . through the flow of chemical messengers across the synaptic junction. The majority of these chemical messengers, or "neurotransmitters," are small **peptides**, catecholamines or amino acids. When the appropriate stimulus is received by a neural axon connection, the neurotransmitters diffuse across the synapse to the adjacent neuron, thereby conveying the stimulus to the next neuron along the **neural network**. Based upon the complexity of the information transferred between the nerve cells, it is currently believed that between 50 and. . .

US PAT NO: 5,218,529 [IMAGE AVAILABLE] L5: 3 of 3

SUMMARY:

BSUM(21)

In . . . the learning process to improve the network's ability to find the global minimum for the weights and thresholds. Recently, feed-forward **neural networks** with one hidden layer of neurons have been shown to be effective in speech recognition; the same architecture shows promise. . . sequences, the secondary structure of proteins. Only a small amount of experimental work has been published demonstrating the utility of **neural networks** in natural product chemistry. Several attempts have been made to utilize **neural networks** to resolve 3-D structural patterns of proteins from their amino acid sequences. Networks have been designed that can predict with up to 79% accuracy the secondary structure of **peptides** from knowledge of their amino acid sequences. L. H. Holley & M. Karplus, 86 Proc. Acad. Natl. Acad. Sci. USA. . . the network was the available 3-D structures and associated amino acid sequences of proteins obtained by X-ray crystal structure analyses. **Neural networks** have also been successfully used in locating promotor sites in DNA sequences, as discussed in A. V. Lukashin, et al.,. . .

=>